Section 1. Registration Information

Source Identification

Facility Name:	Pinal Energy, LLC
Parent Company #1 Name:	Kort Investment Corporation
Parent Company #2 Name:	

Submission and Acceptance

Submission Type:	Re-submission
Subsequent RMP Submission Reason:	5-year update (40 CFR 68.190(b)(1))
Description:	
Receipt Date:	02-Nov-2012
Postmark Date:	02-Nov-2012
Next Due Date:	02-Nov-2017
Completeness Check Date:	02-Nov-2012
Complete RMP:	Yes
De-Registration / Closed Reason:	
De-Registration / Closed Reason Other Text:	
De-Registered / Closed Date:	
De-Registered / Closed Effective Date:	
Certification Received:	Yes

Facility Identification

EPA Facility Identifier:	1000 0020 0418
Other EPA Systems Facility ID:	

Dun and Bradstreet Numbers (DUNS)

Facility DUNS:	197270635
Parent Company #1 DUNS:	58793084
Parent Company #2 DUNS:	

Facility Location Address

Street 1:	38585 W Cowtown Rd
Street 2:	
City:	Maricopa
State:	ARIZONA
ZIP:	85138
ZIP4:	
County:	PINAL

Facility Latitude and Longitude

Latitude (decimal):	33.013948
Longitude (decimal):	-111.985246
Lat/Long Method:	Interpolation - Satellite
Lat/Long Description:	Center of Facility
Horizontal Accuracy Measure:	25
Horizontal Reference Datum Name:	North American Datum of 1927
Source Map Scale Number:	

Owner or Operator

Operator Name:	Pinal Energy, LLC
Operator Phone:	(520) 494-2400

Mailing Address

Operator Street 1:	38585 W. Cowtown Rd.
Operator Street 2:	
Operator City:	Maricopa
Operator State:	ARIZONA
Operator ZIP:	85138
Operator ZIP4:	
Operator Foreign State or Province:	
Operator Foreign ZIP:	
Operator Foreign Country:	

Name and title of person or position responsible for Part 68 (RMP) Implementation

RMP Name of Person:	Lee Steffen
RMP Title of Person or Position:	Environmental Health & Safety Manag
RMP E-mail Address:	lsteffen@pinalenergyllc.com

Emergency Contact

Emergency Contact Name:	Matt Rynearson
Emergency Contact Title:	Plant Manager
Emergency Contact Phone:	(520) 494-2400
Emergency Contact 24-Hour Phone:	(520) 483-0530
Emergency Contact Ext. or PIN:	2002
Emergency Contact E-mail Address:	mrynearson@pinalenergyllc.com

Other Points of Contact

Facility or Parent Company E-mail Address:	
Facility Public Contact Phone:	
Facility or Parent Company WWW Homepage Address:	www.pinalenergyllc.com

Local Emergency Planning Committee

LEPC:	Pinal County LEPC

Full Time Equivalent Employees

Number of Full Time Employees (FTE) on Site:	40
FTE Claimed as CBI:	

Covered By

OSHA PSM :	
EPCRA 302 :	
CAA Title V:	
Air Operating Permit ID:	

OSHA Ranking

OSHA Star or Merit Ranking:

Last Safety Inspection

Last Safety Inspection (By an External Agency) Date:	01-May-2012
Last Safety Inspection Performed By an External Agency:	Fire Department

Predictive Filing

Did this RMP involve predictive filing?:

Preparer Information

Preparer Name:
Preparer Phone:
Preparer Street 1:
Preparer Street 2:
Preparer City:
Preparer State:
Preparer ZIP:
Preparer ZIP4:
Preparer Foreign State:
Preparer Foreign Country:
Preparer Foreign ZIP:

Confidential Business Information (CBI)

CBI Claimed:
Substantiation Provided:
Unsanitized RMP Provided:

Reportable Accidents

Reportable Accidents:	See Section 6. Accident History below to determine if there were any accidents reported for this RMP.

Process Chemicals

Process ID:	1000034253
Description:	Aqueous Ammonia Storage
Process Chemical ID:	1000041397
Program Level:	Program Level 2 process
Chemical Name:	Ammonia (conc 20% or greater)
CAS Number:	7664-41-7
Quantity (lbs):	249465
CBI Claimed:	
Flammable/Toxic:	Toxic

Process ID:	1000034251
Description:	Denaturant Storage
Process Chemical ID:	1000041395
Program Level:	Program Level 2 process
Chemical Name:	Flammable Mixture
CAS Number:	00-11-11
Quantity (lbs):	624169
CBI Claimed:	
Flammable/Toxic:	Flammable

Flammable Mixture Chemical Components

Flammable Mixture Chemical ID:	1000034340
Chemical Name:	Isopentane [Butane, 2-methyl-]
CAS Number:	78-78-4
Flammable/Toxic:	Flammable

Flammable Mixture Chemical ID:	1000034342
Chemical Name:	Propane
CAS Number:	74-98-6
Flammable/Toxic:	Flammable

Flammable Mixture Chemical ID:	1000034339
Chemical Name:	Isobutane [Propane, 2-methyl]
CAS Number:	75-28-5
Flammable/Toxic:	Flammable

Flammable Mixture Chemical ID:	1000034338
Chemical Name:	Pentane
CAS Number:	109-66-0
Flammable/Toxic:	Flammable

Flammable Mixture Chemical ID:	1000034343
Chemical Name:	Butane
CAS Number:	106-97-8
Flammable/Toxic:	Flammable

Flammable Mixture Chemical ID:	1000034341
Chemical Name:	Ethane
CAS Number:	74-84-0
Flammable/Toxic:	Flammable

Process NAICS

Process ID:	1000034251
Process NAICS ID:	1000034535
Program Level:	Program Level 2 process
NAICS Code:	325193
NAICS Description:	Ethyl Alcohol Manufacturing

Process ID:	1000034253
Process NAICS ID:	1000034538
Program Level:	Program Level 2 process
NAICS Code:	325193

NAICS Description: Ethyl Alcohol Manufacturing

Section 2. Toxics: Worst Case

Toxic Worst ID: 1000028434

Percent Weight:	30.0
Physical State:	Liquid
Model Used:	EPA's RMP*Comp(TM)
Release Duration (mins):	10
Wind Speed (m/sec):	4.1
Atmospheric Stability Class:	F
Topography:	Rural

Passive Mitigation Considered

Dikes:	Yes
Enclosures:	
Berms:	
Drains:	
Sumps:	
Other Type:	

Section 3. Toxics: Alternative Release

Toxic Alter ID: 1000030224

Percent Weight:	29.5
Physical State:	Liquid
Model Used:	EPA's RMP*Comp(TM)
Wind Speed (m/sec):	3.0
Atmospheric Stability Class:	D
Topography:	Rural

Passive Mitigation Considered

Dikes:	Yes
Enclosures:	
Berms:	
Drains:	
Sumps:	
Other Type:	

Active Mitigation Considered

Sprinkler System:	Yes
Deluge System:	
Water Curtain:	
Neutralization:	
Excess Flow Valve:	
Flares:	
Scrubbers:	
Emergency Shutdown:	
Other Type:	diked area, with fire sprinkler system in place

Section 4. Flammables: Worst Case

Flammable Worst ID: 1000021056

Model Used:	EPA's RMP*Comp(TM)
Endpoint used:	1 PSI

Passive Mitigation Considered

Blast Walls:	
Other Type:	tanks in secondary containment

Section 5. Flammables: Alternative Release

Flammable Alter ID: 1000019651

Model Used:	EPA's RMP*Comp(TM)

Passive Mitigation Considered

Dikes:	Yes
Fire Walls:	
Blast Walls:	
Enclosures:	
Other Type:	tanks in secondary containment

Active Mitigation Considered

Sprinkler System:	
Deluge System:	
Water Curtain:	
Excess Flow Valve:	
Other Type:	

Section 6. Accident History

No records found.

Section 7. Program Level 3

Section 8. Program Level 2

Description:

Program Level 2 Prevention Program Chemicals

Prevention Program Chemical ID:	1000025781
Chemical Name:	Flammable Mixture
Flammable/Toxic:	Flammable
CAS Number:	00-11-11
Prevention Program Level 2 ID:	1000025412
NAICS Code:	325193

Safety Information

Safety Review Date (The date of the most recent review or revision of the safety infomation):	17-Aug-2012

Safety Compliance Regulations or Design Codes/Standards

NFPA 58 (or state law based on NFPA 58):	Yes
OSHA (29 CFR 1910.111):	
ASTM Standards:	Yes
ANSI Standards:	Yes
ASME Standards:	Yes
None:	
Other Regulation, Design Code, or Standard:	
Comments:	

Hazard Review

Hazard Review Date (The date of completion of most recent review or update):	17-Aug-2012
Change Completion Date (The expected or actual date of completion of all changes resulting from the hazard review):	26-Oct-2012

Major Hazards Identified

Toxic Release:	
Fire:	Yes
Explosion:	Yes
Runaway Reaction:	
Polymerization:	
Overpressurization:	
Corrosion:	Yes
Overfilling:	Yes
Contamination:	
Equipment Failure:	Yes
Loss of Cooling, Heating, Electricity, Instrument Air:	
Earthquake:	
Floods (Flood Plain):	

Tornado:
Hurricanes:
Other Major Hazard Identified:

Process Controls in Use

Vents:	Yes
Relief Valves:	
Check Valves:	Yes
Scrubbers:	
Flares:	
Manual Shutoffs:	Yes
Automatic Shutoffs:	Yes
Interlocks:	
Alarms and Procedures:	Yes
Keyed Bypass:	
Emergency Air Supply:	
Emergency Power:	
Backup Pump:	
Grounding Equipment:	Yes
Inhibitor Addition:	
Rupture Disks:	
Excess Flow Device:	
Quench System:	
Purge System:	
None:	
Other Process Control in Use:	internal floating roof

Mitigation Systems in Use

Sprinkler System:	
Dikes:	Yes
Fire Walls:	
Blast Walls:	
Deluge System:	
Water Curtain:	
Enclosure:	
Neutralization:	
None:	
Other Mitigation System in Use:	fire foam cannon system (external suppression), foam pipe going into top of tank (internal suppression)

Monitoring/Detection Systems in Use

Process Area Detectors:	
Perimeter Monitors:	
None:	
Other Monitoring/Detection System in Use:	Security cameras, 24-hour rounds

Changes Since Last PHA or PHA Update

Reduction in Chemical Inventory:
Increase in Chemical Inventory:
Change Process Parameters:
Installation of Process Controls:

Installation of Process Detection Systems:	
Installation of Perimeter Monitoring Systems:	
Installation of Mitigation Systems:	
None Recommended:	Yes
None:	
Other Changes Since Last PHA or PHA Update:	

Review of Operating Procedures

Operating Procedures Revision Date (The date of the most recent review or revision of operating procedures):	28-Mar-2011

Training

Training Review Date (The date of the most recent review or revision of training programs):	12-Mar-2012

The Type of Training Provided

Classroom:	Yes
On the Job:	Yes
Other Training:	

The Type of Competency Testing Used

Written Tests:	
Oral Tests:	
Demonstration:	Yes
Observation:	
Other Type of Competency Testing Used:	

Maintenance

Maintenance Review Date (The date of the most recent review or revision of maintenance procedures):	01-May-2012
Equipment Inspection Date (The date of the most recent equipment inspection or test):	08-May-2012
Equipment Most Recently Inspected or Tested:	tank, valves

Compliance Audits

Compliance Audit Date (The date of the most recent compliance audit):	20-Jan-2010
Audit Completion Date (The expected or actual date of completion of all changes resulting from the compliance audit):	18-May-2010

Incident Investigation

Incident Investigation Date (The date of the most recent incident investigation (if any)):	
Incident Investigation Changes Date (Expected or actual date of completion of all changes resulting from the investigation):	

Most Recent Change Date: (The date of the most recent change that triggered a review or revision of safety information):	08-Sep-2011

Confidential Business Information

CBI Claimed:

Description:

Program Level 2 Prevention Program Chemicals

Prevention Program Chemical ID:	1000025780
Chemical Name:	Ammonia (conc 20% or greater)
Flammable/Toxic:	Toxic
CAS Number:	7664-41-7
Prevention Program Level 2 ID:	1000025411
NAICS Code:	325193

Safety Information

Safety Review Date (The date of the most recent review or revision of the safety infomation):	17-Aug-2012

Safety Compliance Regulations or Design Codes/Standards

NFPA 58 (or state law based on NFPA 58):	Yes
OSHA (29 CFR 1910.111):	
ASTM Standards:	Yes
ANSI Standards:	Yes
ASME Standards:	Yes
None:	
Other Regulation, Design Code, or Standard:	
Comments:	

Hazard Review

Hazard Review Date (The date of completion of most recent review or update):	17-Aug-2012
Change Completion Date (The expected or actual date of completion of all changes resulting from the hazard review):	26-Oct-2012

Major Hazards Identified

Toxic Release:	Yes
Fire:	
Explosion:	
Runaway Reaction:	
Polymerization:	
Overpressurization:	
Corrosion:	Yes

Overfilling:	Yes
Contamination:	
Equipment Failure:	
Loss of Cooling, Heating, Electricity, Instrument Air:	
Earthquake:	
Floods (Flood Plain):	
Tornado:	
Hurricanes:	
Other Major Hazard Identified:	

Process Controls in Use

Vents:	Yes
Relief Valves:	Yes
Check Valves:	Yes
Scrubbers:	
Flares:	
Manual Shutoffs:	Yes
Automatic Shutoffs:	Yes
Interlocks:	Yes
Alarms and Procedures:	Yes
Keyed Bypass:	
Emergency Air Supply:	
Emergency Power:	
Backup Pump:	
Grounding Equipment:	
Inhibitor Addition:	
Rupture Disks:	
Excess Flow Device:	
Quench System:	
Purge System:	
None:	
Other Process Control in Use:	

Mitigation Systems in Use

Sprinkler System:	Yes
Dikes:	Yes
Fire Walls:	
Blast Walls:	
Deluge System:	
Water Curtain:	
Enclosure:	
Neutralization:	
None:	
Other Mitigation System in Use:	

Monitoring/Detection Systems in Use

Process Area Detectors:	
Perimeter Monitors:	Yes
None:	
Other Monitoring/Detection System in Use:	

Changes Since Last PHA or PHA Update

Reduction in Chemical Inventory:	
Increase in Chemical Inventory:	
Change Process Parameters:	
Installation of Process Controls:	
Installation of Process Detection Systems:	
Installation of Perimeter Monitoring Systems:	
Installation of Mitigation Systems:	
None Recommended:	Yes
None:	
Other Changes Since Last PHA or PHA Update:	

Review of Operating Procedures

Operating Procedures Revision Date (The date of the most recent review or revision of operating procedures):	06-Mar-2012

Training

Training Review Date (The date of the most recent review or revision of training programs):	12-Mar-2012

The Type of Training Provided

Classroom:	Yes
On the Job:	
Other Training:	

The Type of Competency Testing Used

Written Tests:	
Oral Tests:	
Demonstration:	Yes
Observation:	
Other Type of Competency Testing Used:	

Maintenance

Maintenance Review Date (The date of the most recent review or revision of maintenance procedures):	01-May-2012
Equipment Inspection Date (The date of the most recent equipment inspection or test):	08-May-2012
Equipment Most Recently Inspected or Tested:	tanks, valves

Compliance Audits

Compliance Audit Date (The date of the most recent compliance audit):	20-Jan-2010
Audit Completion Date (The expected or actual date of completion of all changes resulting from the compliance audit):	18-May-2010

Incident Investigation

Incident Investigation Date (The date of the most recent incident investigation (if any)):	
Incident Investigation Changes Date (Expected or actual date of completion of all changes resulting from the investigation):	
Most Recent Change Date: (The date of the most recent change that triggered a review or revision of safety information):	08-Sep-2011

Confidential Business Information

CBI Claimed:

Section 9. Emergency Response

Written Emergency Response (ER) Plan

Community Plan (Is facility included in written community emergency response plan?):	Yes
Facility Plan (Does facility have its own written emergency response plan?):	
Response Actions (Does ER plan include specific actions to be taken in response to accidental releases of regulated substance(s)?):	
Public Information (Does ER plan include procedures for informing the public and local agencies responding to accidental release?):	
Healthcare (Does facility's ER plan include information on emergency health care?):	

Emergency Response Review

Review Date (Date of most recent review or update of facility's ER plan):	

Emergency Response Training

Training Date (Date of most recent review or update of facility's employees):	

Local Agency

Agency Name (Name of local agency with which the facility ER plan or response activities are coordinated):	Maricopa Fire Department
Agency Phone Number (Phone number of local agency with which the facility ER plan or response activities are coordinated):	(520) 568-3333

Subject to

OSHA Regulations at 29 CFR 1910.38:	Yes
OSHA Regulations at 29 CFR 1910.120:	
Clean Water Regulations at 40 CFR 112:	Yes
RCRA Regulations at CFR 264, 265, and 279.52:	
OPA 90 Regulations at 40 CFR 112, 33 CFR 154, 49 CFR 194, or 30 CFR 254:	
State EPCRA Rules or Laws:	Yes
Other (Specify):	

Executive Summary

RISK MANAGEMENT PLAN EXECUTIVE SUMMARY
Pinal Energy, LLC

Pinal Energy, LLC (Pinal) is a producing ethanol manufacturing facility. Arizona Grain is adjacent to the location where Pinal Energy exists. Arizona Grain supplies the corn utilized for ethanol production at Pinal.

Pinal Energy began production in August of 2007. Pinal Energy has undergone several reviews of their constructed procedures and various reports to obtain plant efficiency and remain compliant with all governmental regulations.

Accidental Release Prevention and Response Policies:

Pinal is committed to worker and public safety. This commitment is demonstrated in the resources invested in accident prevention, such as personnel training and testing, safety and compliance audits, as well as considering safety in the design, installation, operation, and maintenance of the facility.

Pinal's policy has been to implement reasonable controls to prevent foreseeable releases of regulated substances. However, if a release does occur, plant personnel will respond to contain the release as necessary.

DENATURANT STORAGE: The two ethanol tanks, two final product tanks, and denaturant tank are all located in a large bermed Tank Farm containment area that is separated from the plant. This containment area is equipped with seven foot walls and a fire suppression foam cannon system. The foam suppression system is also connected to and runs to the top of each tank. During an incident the cannon would externally coat the tanks, while the pipe connecting to each tank would flood the tank internally. A release from one of these tanks would not be able to migrate off-site, and a fire would be quickly extinguished.

AMMONIA: An ammonia tank, sulfuric acid tank, urea tank, sodium hydroxide tank, gluco amylase tank, and an alpha amylase tank are all located in the same containment area. This containment area is separated by four foot walls. The ammonia and urea tank are located in the same containment area and an overflow dike that is also contained by a four foot wall is also constructed. This containment area is also protected by a pressurized fire system that in the event of a fire would easily be extinguished via fire pumps with two and a half hours of water supply available. A release from one of these tanks would not be able to mitigate off-site, and a fire would be quickly extinguished. Pinal has an emergency response contact on-call and a Hazardous Materials Management Plan (HMMP). The HMMP is coordinated by the Maricopa Fire department and includes written emergency response procedures.

Description of the Stationary Source and Regulated Substances:

The Pinal Energy LLC ethanol plant is located near Maricopa, Pinal County, Arizona.

The facility currently operates 24 hours per day, 7 days a week for the purpose of manufacturing fuel grade ethanol from corn. The regulated substances under the RMP program includes denaturant(gasoline) and 30% Ammonium Hydroxide, which is considered an extremely hazardous substance. Pinal has determined that the radius of impact from a worst-case release would be approximately 0.7 miles for the denaturant, and 4.1 miles for the ammonium hydroxide.

Off-site Consequence Analysis Results:

AMMONIA: The worst-case scenario at the facility is the release of all the contents from the Ammonia tank creating a liquid spill evaporation. The worst case distance to toxic endpoint is approximately 2.2 miles from the center of the plant. Two public receptors are located within this 2.2 mile radius. The main office of AZ Grain,is located approximately 600 feet away. Also, a cattle company,is located 800 feet southeast of the plant.

DENATURANT: The worst-case scenario at the facility is the release of all the contents from the denaturant tank and gasoline constituents in the denatured ethanol tanks (624,169 lbs of flammable mixture) creating a vapor cloud explosion. The worst-case vapor cloud endpoint is approximately 0.7 miles from the center of the plant. Two public receptors are located within this 0.7 mile radius. The main office of Arizona Grain. Also, a cattle company, is located about 800 feet southeast of the plant.

Although the Pinal Energy LLC ethanol plant has numerous controls in place to prevent a flammable and toxic release to manage potential consequences, no credit for administrative controls or passive mitigation measure were taken into account in evaluating the worst-case and alternative scenarios.

The facility qualifies for Program 2 for Denaturant and Ammonium Hydroxide since public receptors could be impacted by a worst-case release. The facility is not subject to OSHA's Program Safety management requirements that would trigger Program 3.

DENATURANT: Since the facility qualifies for Program 2, an Alternative Release Scenario (ARS) was required for the flammable constituents of the denaturant. The ARS is the release of 624,169 pounds from just the denaturant tank that would create a vapor cloud explosion. The ARS endpoint is approximately 0.5 miles from the center of the facility. Both public receptors would still be affected.

AMMONIA: Since the facility qualifies for Program 2, an Alternative Release Scenario (ARS) was required for the flammable constituents of the Ammonium Hydroxide. The ARS is the release of 249,465 pounds from the ammonia tank that would be caused from a vessel leak. The ARS endpoint is approximately 2.2 miles from the center of the facility. Both public receptors would still be affected.

Five Year Accident History:

Pinal Energy's ethanol facility is subject to RMP upon delivery of substances onsite. There have been no accidents at this time.

Emergency Response Program Information:

The Pinal Facility has several safety programs in place at the facility that incorporate emergency response, including a HMMP.

Pinal conducts regular employee training as part of facility activities. Employees are involved in on-the-job and classroom training programs and are tested using written and demonstration methods. The Pinal corporate policy places the utmost importance on worker, public, and environmental safety, which is reflected in facility plans and training activities.